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## UNITED STATES PATENT AND TRADEMARK OFFICE

EV466810185

UNITED STATES DEPARTMENT OF COMMERCE  
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APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
10/806,789	03/22/2004	Hai-Feng Wang	MS1-606USC1

22801  
 LEE & HAYES PLLC  
 421 W RIVERSIDE AVENUE SUITE 500  
 SPOKANE, WA 99201



CONFIRMATION NO. 2367  
 FORMALITIES LETTER  
 \*OC000000012902050\*  
 \*OC000000012902050\*

Date Mailed: 06/08/2004

## NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

*Filing Date Granted***Items Required To Avoid Abandonment:**

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The oath or declaration is missing.  
*A properly signed oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date, is required.*
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(e) of \$130 for a non-small entity, must be submitted with the missing items identified in this letter.

The application is informal since it does not comply with the regulations for the reason(s) indicated below.

The required item(s) identified below must be timely submitted to avoid abandonment:

- A substitute specification in compliance with 37 CFR 1.52, 1.121(b)(3), and 1.125, is required. The specification, claims, or abstract page(s) submitted is not acceptable and cannot be scanned or properly stored because:
  - The specification, claims, or abstract page(s) 18 contain hand lettering.

**SUMMARY OF FEES DUE:**

Total additional fee(s) required for this application is **\$130** for a Large Entity

- **\$130** Late oath or declaration Surcharge.

Replies should be mailed to: Mail Stop Missing Parts  
Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-1450

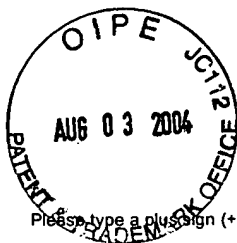
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*A copy of this notice MUST be returned with the reply.*

  
\_\_\_\_\_  
Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE



Please type a plus sign (+) inside this box → ☐

PTO/SB/21 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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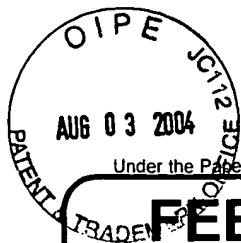
<b>TRANSMITTAL FORM</b> <i>(to be used for all correspondence after initial filing)</i>	<b>Application Number</b>	10/806,789
	<b>Filing Date</b>	Mar 22, 2004
	<b>First Named Inventor</b>	Wang
	<b>Group Art Unit</b>	
	<b>Examiner Name</b>	
<b>Total Number of Pages in This Submission</b>		<b>Attorney Docket Number</b> MS1-606USC1

<b>ENCLOSURES (check all that apply)</b>		
<input checked="" type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Assignment Papers <i>(for an Application)</i>	<input type="checkbox"/> After Allowance Communication to Group
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Drawing(s) Sheets	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment / Reply	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Group <i>(Appeal Notice, Brief, Reply Brief)</i>
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input type="checkbox"/> Other Enclosure(s) <i>(please identify below):</i>
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	Return postcard
<input type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	
<input checked="" type="checkbox"/> Response to Missing Parts/ Incomplete Application	<b>Remarks</b>	
<input checked="" type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		

<b>SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT</b>	
<b>Firm or Individual name</b>	Lewis C. Lee, Reg. No. 34,656
<b>Signature</b>	
<b>Date</b>	Aug. 2, 2004

<b>CERTIFICATE OF EXPRESS MAILING</b>			
I hereby certify that the items listed above as enclosed are being deposited with the U.S. Postal Service as Express Mail, in an envelope addressed to The Commissioner of Patents, Alexandria, VA 22313 on the below-indicated date. The Express Mail No. has also been marked on the listed items.			
<b>Typed or printed name</b>	Carly Taylor	<b>Express Mail No.</b>	EV466810185
<b>Signature</b>		<b>Date</b>	8/3/04

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.



EV466810185

PTO/SB/17 (10-03)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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**FEE TRANSMITTAL  
for FY 2004**

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ ) 0.00

**Complete if Known**

Application Number	10/806,789
Filing Date	Mar 22, 2004
First Named Inventor	Wang
Examiner Name	
Art Unit	
Attorney Docket No.	MS1-606USC1

**METHOD OF PAYMENT (check all that apply)**☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☒ Deposit Account:Deposit  
Account  
Number  
Deposit  
Account  
Name

12-0769

Lee &amp; Hayes, PLLC

The Director is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Credit any overpayments☒ Charge any additional fee(s) or any underpayment of fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	770	2001	385	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1) (\$ ) 0.00

**2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

		Extra Claims	Fee from below	Fee Paid
Total Claims		-20** =	X	
Independent Claims		-3** =	X	
Multiple Dependent				

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$ ) 0.00

\*\*or number previously paid, if greater; For Reissues, see above

**FEE CALCULATION (continued)****3. ADDITIONAL FEES**

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ ) 0.00

**SUBMITTED BY**

Name (Print/Type) Lewis C. Lee

Registration No. 34,656  
(Attorney/Agent)

(Complete if applicable)

Telephone (509) 324-9256

Signature

Date

Aug-2, 2004

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

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If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



EV466810185

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application Serial No. .... 10/806,789  
Filing Date ..... Mar 22, 2004  
Inventorship ..... Wang et al.  
Applicant ..... Microsoft Corporation  
Attorney's Docket No. .... MS1-606USC1  
Title: Search Engine with Natural Language-Based Robust Parsing of User Query  
and Relevance Feedback Learning

**RESPONSE TO NOTICE TO FILE MISSING PARTS**

To: Mail Stop Missing Parts  
Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

From: Lewis C. Lee (Tel. 509-324-9256; Fax 509-323-8979)  
Lee & Hayes, PLLC  
421 W. Riverside Avenue, Suite 500  
Spokane, WA 99201

In response to the Notice to File Missing Parts for the above-mentioned application, a clean copy of the requested page 18, from the originally filed specification, is enclosed.

The requested correction has been made and the application is now complete.

The Notice also stated that an executed declaration was missing from the initial filing of this application. The executed declarations were in fact filed with the application. A copy of the stamped receipt postcard from the PTO indicating receipt of the declarations is enclosed. Courtesy copies of the previously filed declarations are also enclosed.

Respectfully Submitted,

Dated: Aug. 2, 2004

By: 

Lewis C. Lee  
Reg. No. 34,656  
(509) 324-9256

1 parsing to the phrase “*dismounted a horse*”, and the bold path 504 represents  
2 “*immediately coming down*”. This figure also shows seven possible “words”,  
3 some of which (e.g., 上下) might be disputable on whether they should be  
4 considered “words.”

5 To accommodate Chinese input, the robust parser can accept two kinds of  
6 input: Lattice and N-best. The lattice input includes almost all possible  
7 segmentations. However, as there may be too much ambiguity, the parsing  
8 process can become very slow. An alternative choice is to use the N-best input.

9 With reference again to Fig. 4, after segmentation, the segmented sentence  
10 is passed a natural language parser 410 and a keyword module 412. The parser  
11 410 attempts to parse the segmented sentence according to a set of rules found in a  
12 rule database 414. If a sentence parses successfully, the parsing module 142  
13 outputs a parse tree. If parsing is unsuccessful, the keyword unit 412 uses a word  
14 database 416 to extract and output keywords from the segmented sentence. As  
15 shown in Fig. 2, the parse tree and keywords are passed to the FAQ matcher 144  
16 and the keywords are passed to the keyword-based component 146. Accordingly,  
17 the architecture 140 allows templates to be matched regardless of the type of  
18 output, whether parse trees or keywords.

### 20 Exemplary Parsing Methodology

21 One particular implementation of a robust parser is based on a spoken  
22 language system known as “LEAP”, which stands for Language Enabled  
23 Applications. LEAP is technology being developed in Microsoft Research that  
24 aims at spoken language understanding. For a more detailed discussion of LEAP,  
25 the reader is directed to an article by Y. Wang, entitled “A robust parser for

MS1-606USC1

Microsoft Corporation

3/22/2004

The stamp of the U.S. Patent and Trademark Office acknowledges receipt of the documents enumerated below, relating to the following application for letters patent:

**Title:** "Search Engine with Natural Language-Based Robust Parsing of User Query and Relevance Feedback Learning"

**Inventorship:** Wang et al.

1. Patent Application Transmittal
2. Fee Transmittal, in duplicate
3. Copy of Executed Declaration (6 pages)
4. Copy of Parent Patent Application (title page plus pages 1-47, including claims 1-71 & Abstract)
5. 7 sheets of formal drawings (Figs. 1-9)
6. Preliminary Amendment (pages 1-15, Claims 72-82)
7. PTO Return Postcard Receipt

EV436703024US

LEE & HAYES, PLLC  
(509) 324-9256

22857 U.S. PTO  
10/806789



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